

ASAP

Dart Aerospace Ltd.

Date: Friday, 29/08/2008 11:38:23 AM
 User: Julie Lecocq

Process Sheet

Customer	: CU-DAR001 Dart Helicopters Services	Drawing Name	: STRUT WELDMENT ASS'Y
Job Number	: 41665		
Estimate Number	: 10675		
P.O. Number	:	Part Number	: D3443041
This Issue	: 29/08/2008 S.O. No. :	Drawing Number	: D3443 REV. B
Prsht Rev.	: NC	Project Number	: N/A
First Issue	: / / Type : LARGE FAB ASSY	Drawing Revision	: B
Previous Run	: 38821	Material	:
Written By	:	Due Date	: 05/09/2008 Qty: 2 Um: Each
Checked & Approved By	: <u>JUL 08.8.29</u>		
Comment	: EST REV. A 05.11.17 NEW ISSUE EC		

Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
---------	-----------------------	---------------

1.0	D34431	Lug
-----	--------	-----



Comment: Qty.: 1.0000 Each(s)/Unit Total : 2.0000 Each(s)

Pick:

Qty	Part Number	Description	Batch
1	D3443-1	lug	<u>338848</u> ✓

Cpl 08-09-02

2.0	D34435	Tubing
-----	--------	--------



Comment: Qty.: 1.0000 Each(s)/Unit Total : 2.0000 Each(s)

Pick:

Qty	Part Number	Description	Batch
1	D3443-5	Tubing	<u>338849</u> ✓

Cpl 08-09-02

3.0	D34531	Clevis
-----	--------	--------



Comment: Qty.: 1.0000 Each(s)/Unit Total : 2.0000 Each(s)

Pick:

Qty	Part Number	Description	Batch
1	D3453-1	Clevis	<u>334995</u> ✓

Cpl 08-09-02

4.0	238805	SS DOWEL PIN 3/4" LONG
-----	--------	------------------------



Comment: Qty.: 2.0000 Each(s)/Unit Total : 4.0000 Each(s)

Pick:

Qty	Part Number	Description	Batch
2	238-805	SS DOWEL PIN 3/4" LONG	<u>M105037</u> ✓

Cpl 08-09-02

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Friday, 29/08/2008 11:38:23 AM
User: Julie Lecocq

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: STRUT WELDMENT ASS'Y

Job Number: 41665

Part Number: D3443041

Job Number:



Seq. #:

Machine Or Operation:

Description :

5.0

LARGE FAB 1

LARGE FABRICATION RESOURCE 1



Comment: LARGE FABRICATION RESOURCE 1

Weld assembly as per dwg D3443

Pl 08-09-02

(X2)

6.0

QC9

VISUAL WELDING INSPECTION



Comment: VISUAL WELDING INSPECTION

Pl 08-09-02 (2)

7.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

S 08/09/03 (X2)

8.0

POWDER COATING

POWDER COATING



Comment: POWDER COATING

1-Mask holes as per dwg D3443

2-Powder Coat White Gloss (Ref: 4.3.5.2) as per QSI 005 4.3

1st coat

~~2nd coat~~

START TIME:

7:40

OVEN TEMPERATURE:

400°

FINISH TIME:

8:10

FL 08/09/04 (2)

9.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

S 08/09/05 (X2)

10.0

63215K32

Spherical Bearing



Comment: Qty.: 1.0000 Each(s)/Unit Total: 2.0000 Each(s)

Pick:

Qty Part Number

Description

Batch

1 63215K32

Spherical Bearing

M108635

S 08/09/05 (2)

11.0

SMALL FAB 1

SMALL & MEDIUM FAB RESOURCE 1



Comment: SMALL & MEDIUM FAB RESOURCE 1

Assemble bearing and ball plungers as per dwg D3443 ensure bearing rotates smoothly

FF 08/09/05 (2)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: D3443-041 PAR #: N/A Fault Category: Prod/Finishing NCR: (Yes) No DQA: D Date: 01/05/05
D412-630-031/032 QA: N/C Closed: D Date: 01/09/05

NCR: <u>41665</u>		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
8/9/04	80	Powder coat inspection found that the lettering on mat. came through the powder coat. R.C. Part wasn't cleaned properly before welding	[Signature]	Sculpt entire surface with 320 grit sand paper. Wash with Acetone.	FX 08/09/04	[Signature]	[Signature]	[Signature]
				Re Powder coat as per QSZ 005. Qty (X1)	FX 08/09/04			
								[Signature]

NOTE: Date & initial all entries

Date: Friday, 29/08/2008 11:38:23 AM
User: Julie Lecocq

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: STRUT WELDMENT ASS'Y

Job Number: 41665

Part Number: D3443041

Job Number:



Seq. #:

Machine Or Operation:

Description :

12.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

~~08-09-04~~

(A2)

13.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: 265

G-A

08/09/05 (2)

(LX)

Sp

14.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

08/09/05

Job Completion



MF 08-09-05

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

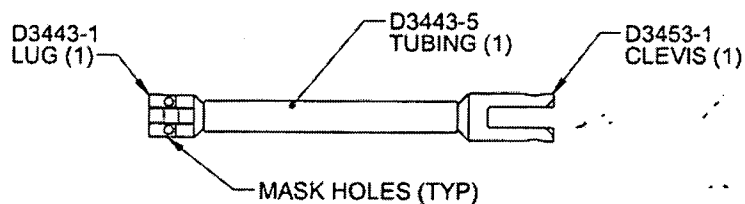
NOTE: Date & initial all entries



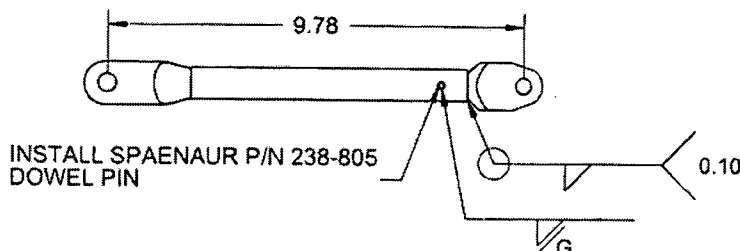
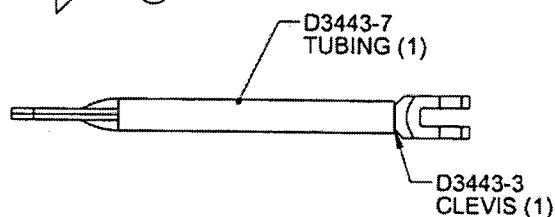
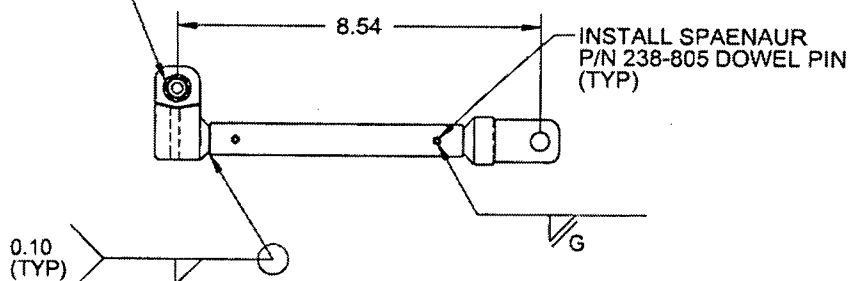
DESIGN RF	DRAWN BY RF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>H</i>	APPROVED <i>H</i>	DRAWING NO. D3443	REV. B SHEET 1 OF 3
DATE 05.12.05	TITLE STRUT WELDMENT ASSEMBLY 1:4		
A	05.09.02	NEW ISSUE	
B	05.12.05	ADDED -9 PIN; REMOVED BALL PLUNGER; REVISE TOLERANCE; & Ø 0.125 WAS #30	

RELEASED

05.12.09 *H*

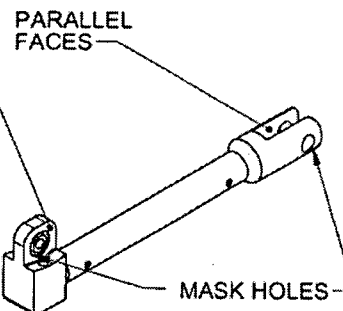


PRESS FIT McMASTER-CARR P/N 63215K32
BALL JOINT BEARING AFTER POWDER COAT

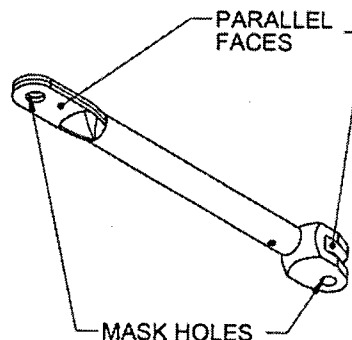


NOTES:

- 1) WELD PER DART QSI 004
- 2) FINISH: POWDER COAT WHITE (4.3.5.2) PER DART QSI 005 4.3
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) IDENTIFY WITH DART P/N USING FINE POINT PERMANENT INK MARKER



D3443-041



D3443-043

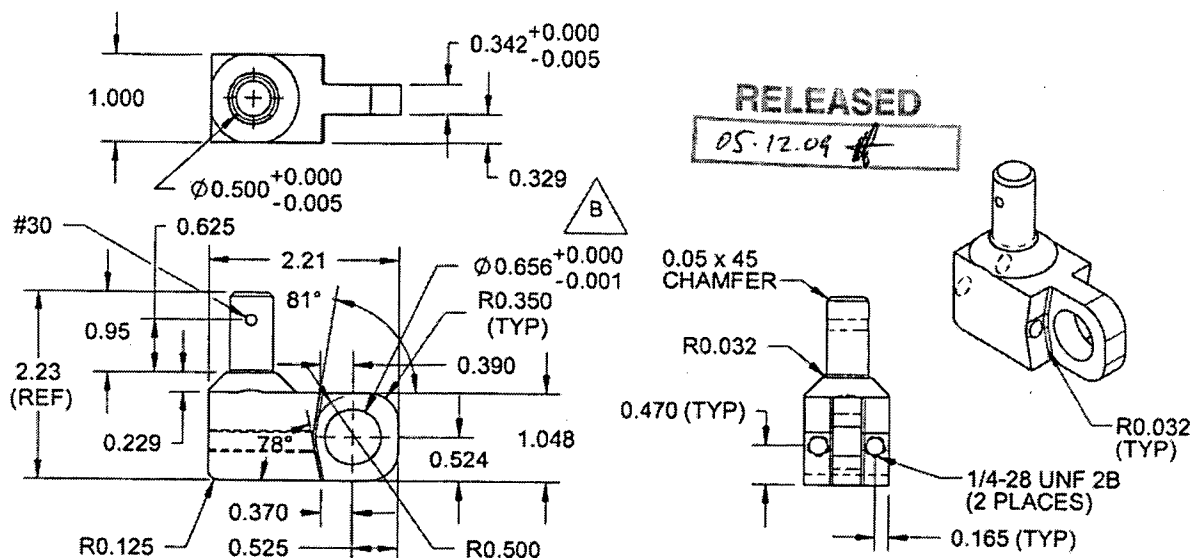
SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. *41660*

COPYRIGHT © 2005 BY DART AEROSPACE LTD.

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.



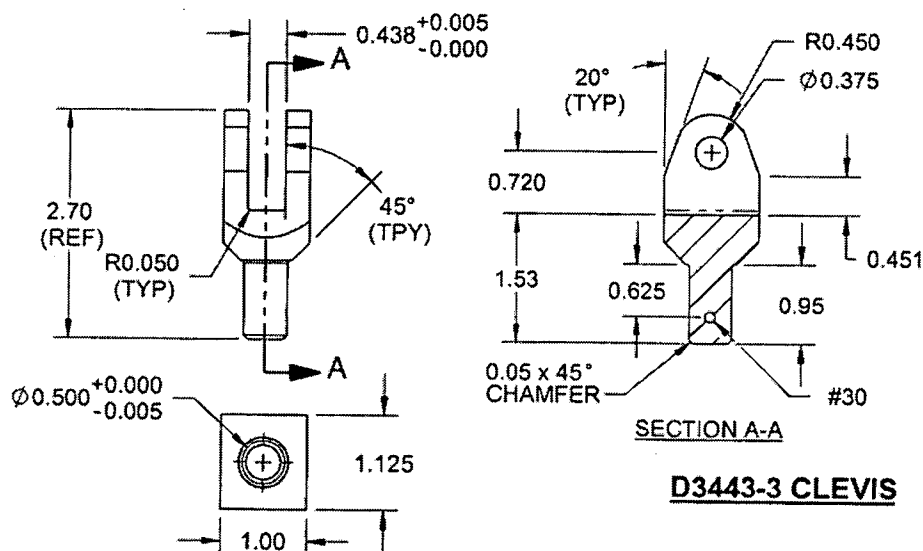
DESIGN RF	DRAWN BY RF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED #	APPROVED #	DRAWING NO. D3443	REV. B SHEET 2 OF 3
DATE 05.12.05	TITLE STRUT WELDMENT ASSEMBLY 1:2		



D3443-1 LUG

D3443-1 NOTES:

- 1) MATERIAL: 17-4 SS PER AMS 5604/5643 (REF DART SPEC M17-4B)



D3443-3 CLEVIS

D3443-3 NOTES:

- 1) MATERIAL: AISI 304 SS ROUND BAR (REF. DART SPEC M304R)

GENERAL NOTES:

- 2) FINISH: NONE
3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
4) ALL DIMENSIONS ARE IN INCHES
5) BREAK ALL UNMARKED SHARP EDGES 0.005 TO 0.010

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 41665

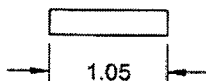
COPYRIGHT © 2005 BY DART AEROSPACE LTD.

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.



DESIGN RF	DRAWN BY RF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED #	APPROVED #	DRAWING NO. D3443	REV. B SHEET 3 OF 3
DATE 05.12.05	TITLE STRUT WELDMENT ASSEMBLY 1:2		

$\phi 0.210^{+0.005}_{-0.010}$



D3443-9 PIN

D3443-9 NOTES:

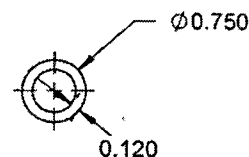
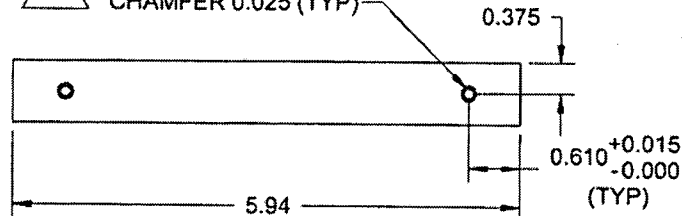
- 1) MATERIAL: DELRIN II 150R OR ACETRON GP ACETAIL (REF. DART SPEC M-DELRIN-R)
- 2) FINISH: NONE
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES

RELEASED

05.12.09

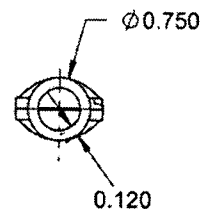
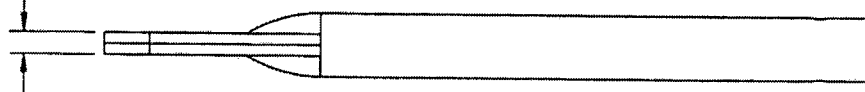


DRILL $\phi 0.125$ THRU
CHAMFER 0.025 (TYP)



D3443-5 TUBING

$0.260^{+0.000}_{-0.030}$



DRILL $\phi 0.125$ THRU
CHAMFER 0.025

D3443-7 TUBING

D3443-5/-7 NOTES:

- 1) MATERIAL: AISI 316/304 SS SEAMLESS TUBING (REF. DART SPEC M304TRO.7500W.020)
- 2) FINISH: NONE
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL UNMARKED SHARP EDGES 0.005 TO 0.025

SHOP COPY

RETURN TO
ENGINEERING

CONTROLLED COPY
SUBJECT TO AMENDMENT

WITHOUT NOTICE

WORK ORDER

NO. 41665

COPYRIGHT © 2005 BY DART AEROSPACE LTD.

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.